

**I CLAIM AS MY INVENTION:**

1. A method for digital subtraction angiography comprising the steps of:  
providing a 3D volume dataset, obtained from a computed tomography scan  
of a body region containing structures without enrichment of the  
structures with a contrast agent;  
from said 3D volume dataset, calculating a first 2D x-ray image of said body  
region without enrichment of said structures with contrast agent;  
generating a second 2D image of said body region with contrast agent  
enrichment of said structures; and  
subtracting said first 2D x-ray image from said second 2D x-ray image.

2. A method as claimed in claim one comprising generating said 3D  
dataset by conducting said computed tomography scan of said body region with a  
C-arm CT apparatus.

3. A method as claimed in claim one comprising bringing said second 2D  
x-ray image into registration with said 3D volume set by digital image processing.